

### **Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) An apparatus, comprising:  
  
a circuit to generate a training pattern;  
  
a debug circuit to generate debug information; and  
  
an information assembly unit to combine the training pattern with the debug information, wherein the training pattern is to enable a receiver of a combined training pattern and debug information to maintain bit and symbol synchronization.
2. (Original) The apparatus of claim 1, further comprising a serializer unit to serialize the combined debug and training pattern information.
3. (Original) The apparatus of claim 2, further comprising an output circuit to drive the combined debug and training pattern information onto an interconnect.
4. (Original) The apparatus of claim 3, the output circuit to drive the combined debug and training pattern information onto a high-speed asynchronous interconnect.
5. (Original) The apparatus of claim 4, the training pattern to include parity information.

6. (Original) The apparatus of claim 5, the serializer unit to reduce the debug and training pattern information down to 10 wires.

7. (Original) The apparatus of claim 6, the output circuit to output 10 bits at a time onto the interconnect.

8. (Original) The apparatus of claim 7, the debug and training pattern information organized into 80 bit packets, where 72 bits are debug information and 8 bits are training pattern information.

Claims 9-13 (Cancelled)

14. (Currently Amended) A system, comprising:

a transmitting device including

a circuit to generate a training pattern,

a debug circuit to generate debug information,

an information assembly unit to combine the training pattern with the

debug information, wherein the training pattern is to enable a

receiver of a combined training pattern and debug information to maintain bit and symbol synchronization, and

a serializer unit to serialize the combined training pattern and debug information ~~debug and training pattern~~

~~information;~~ and

a receiving device coupled to the transmitting device via an interconnect, the receiving device including

an input circuit to receive the combined training pattern and debug information ~~debug and training pattern~~

~~information~~ over an interconnect, and

a de-serialization unit to receive the combined training pattern and debug information ~~debug and training information~~ from

the input circuit, and

a data extraction unit coupled to the de-serialization unit to separate the debug information from the training pattern ~~information~~.

15. (Currently Amended) The system of claim 14, the transmitting device further including an output circuit to drive the combined training pattern and debug information ~~debug and training pattern information~~ onto the interconnect.

16. (Original) The system of claim 15, wherein the interconnect is a high-speed asynchronous interconnect.

17. (Original) The system of claim 16, the output circuit to output 10 bits at a time onto the interconnect.

18. (Currently Amended) The system of claim 17, the combined training pattern and debug information ~~debug and training pattern information~~ organized into 80 bit packets, where 72 bits are debug information and 8 bits are training pattern information.

19. (Currently Amended) A method, comprising:  
combining debug information with a training pattern, wherein the training pattern is to enable a receiver of a combined training pattern and debug information to maintain bit and symbol synchronization;

serializing the combined training pattern and debug information to create a serialized training pattern and debug information; and

outputting the serialized training pattern and debug information ~~debug and training information~~ onto an interconnect.

20. (Original) The method of claim 19, wherein combining debug information with a training pattern includes combining debug information with a training pattern that includes parity information.

21. (Currently Amended) The method of claim 20, wherein serializing the combined training pattern and debug information includes reducing the combined training pattern and debug information down to 10 wires.

22. (Currently Amended) The method of claim 21, wherein outputting the serialized training pattern and debug information ~~debug and training pattern information~~ includes outputting 80 bit packets, wherein 72 bits are debug information and 8 bits are training pattern ~~information~~.